Appendix C

North Carolina
Department of Health and Human Services
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James B. Hunt Jr., Governor

September 21, 1999

H. David Bruton, M.D., Secretary

MEMORANDUM

To: Local Health Directors
Family Physicians
Pediatricians
Community & Migrant Health Centers

From: A. Dennis McBride, M.D., M.P.H.
State Health Director

Re: Enhanced Recommendations for Lead Poisoning Prevention

Last October I issued recommendations for lead poisoning prevention in North Carolina based upon guidelines that had been issued by CDC. Recommendations included a more targeted approach to screening, but also required blood lead screening at ages 12 months and again at 24 months for all children participating in Health Check (Medicaid), Health Choice, or WIC. The recommendations also required an environmental investigation by the local health department when a child's blood lead level persists at $\geq$ 15 ug/dL or is confirmed to be $\geq$ 20 ug/dL.

Lead remains the top environmental health threat for our young children, and I am particularly concerned about children in lower socio-economic groups who are at higher risk for elevated blood lead levels and their deleterious effects. I am, therefore, issuing "enhanced" recommendations, which include two significant changes from the prior document:

1. Because screening rates of high-risk children remain low, I am requesting that local health directors take leadership in the development of county-based plans to dramatically increase blood lead screening rates. The goal should at least be the universal blood lead screening of 12 and 24 month-old children participating in Health Check, Health Choice, or WIC. I am also requesting that WIC Programs make screening available for 18-and 30 month-old children when they appear for WIC recertification and there is no evidence that screening was performed by the "medical home." By bringing together the resources of Carolina Access, Health Check Coordinators, and WIC and other local health programs, the challenge is to create the most effective and efficient way of achieving universal screening of these children in each community. We have had great success in increasing

immunization rates: this success needs to be replicated with regard to blood lead screening.

2. Because there is growing evidence that even low blood lead levels are harmful to young children, and because simple and inexpensive environmental interventions (such as careful and frequent dusting and mopping) can significantly reduce exposure, environmental investigations shall now be offered for all children less than six years-of-age with confirmed blood lead levels $\geq$ 10 µg/dL. The Division of Environmental Health will conduct investigations for children with confirmed elevations between 10 and 19 µg/dL, unless the local health department chooses to offer this expanded coverage. Local health departments are still responsible for mandated environmental investigations for children with blood lead levels $\geq$ 20 µg/dL.

We are grateful for the cooperation of all providers as we seek to make North Carolina's children "lead free." We hope these "enhanced" recommendations will help us achieve that goal. If you should have any questions regarding these recommendations, please contact Ed Norman in the Division of Environmental Health at (919) 715-3293.

ADM:tv

North Carolina
Minimum Recommendations
Lead Poisoning Prevention
Effective Date: October 1, 1999

Education

Educational materials regarding lead exposure should be made available to families of all children less than 72 months of age. Distribution of these materials should occur at least during all well-child visits. Educational materials are available free of charge through the Division of Environmental Health.

Assessment for Risk of Exposure

Because blood lead remains the principal environmental concern for our young children, universal blood lead screening at 12 and again at 24 months of age (or at first contact between 25 and 72 months if the child has not been previously screened) is strongly encouraged.

Note: Local health departments should take the initiative in assuring a coordinated approach to the universal blood lead screening of at least those young children participating in Health Check (Medicaid), Health Choice, or WIC. All primary care providers should be included in this process, with the twin objectives of increasing the number of children screened while also strengthening the concept of the medical home.

At a minimum, the attached "Lead Risk Assessment Questionnaire" should be administered on all children at 12 months and 24 months of age (or at first contact between 25 and 72 months if the child has not been previously assessed). The questionnaire protocol determines those children who should receive blood lead screening at those ages. Questionnaires are available free of charge through the Division of Environmental Health.

Risk assessment and (when indicated) blood lead screening should occur during well-child visits to the child's primary care provider. Referral solely for risk assessment or blood lead screening is strongly discouraged.

Screening Methodology

Direct blood lead measurement is the screening test of choice. Fingerstick, capillary blood specimens are adequate for initial screening and rescreening tests, provided that precautions are taken to minimize the risk of contamination. Venous blood specimens should be collected for confirmation of all elevated blood lead results $\geq$ 10 ug/dL.

The State Laboratory is available to analyze blood specimens on all children less than six years of age collected by all providers at no charge. A listing of independent laboratories certified for blood lead testing is maintained by the Division of Environmental Health for distribution to providers who choose to use independent laboratories for testing.

Medical and Environmental Response to Test Results

Below is an outline of medical and environmental responses to test results. A detailed discussion of this matter can be found in the CDC Booklet, "Screening Young Children for Lead Poisoning." The Booklet is available through CDC or the Division of Environmental Health. We hope the outline is helpful. It is not intended to replace professional judgment, which must be based on the blood lead level, the presence of symptoms and other circumstances peculiar to an individual child in question.

Blood Lead Concentration (ug/dL)	Recommended Response
<10	Rescreen at 24 months of age.
10-19	Confirmation (venous) testing should be conducted within three months. If confirmed, repeat testing should be conducted every two to three months until the level is shown to be <10 ug/dL on three consecutive tests (venous or fingerstick). The family should receive education and nutrition counseling, and a detailed environmental history should be taken to identify any obvious sources of exposure. If the blood lead level is confirmed at ≥ 10 ug/dL, environmental investigation will be offered.
20-44	Confirmation (venous) testing should be conducted within one week. If confirmed, the child should be referred for medical evaluation and should continue to be retested every two months until the blood lead level is shown to be <10 ug/dL on three consecutive tests (venous or fingerstick). Environmental investigations are required and remediation of identified lead hazards shall occur for all children less than six years old with confirmed blood lead levels ≥ 20 ug/dL.
≥ 45	The child should receive a venous test for confirmation as soon as possible. If confirmed, the child must receive urgent medical and environmental follow-up. Chelation therapy should be administered to children with blood lead levels in this range. Symptomatic lead poisoning or a venous blood lead level ≥70 ug/dL is a medical emergency requiring inpatient chelation therapy.

Appendix D

NC CLPPP Timelines